AMENDMENTS TO THE CLAIMS

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A~~n~~ femoral implant suitable for a knee joint of a patient comprising: ~~having~~

a superior surface and an inferior surface;

wherein the superior surface is configured to oppose~~s~~ at least a portion of a femur and be fixed to the portion when the implant is implanted and the inferior surface is configured to oppose~~s~~ and articulate with at least a portion of a tibial implant surface when the implant is implanted; and ~~further~~

wherein ~~at least one of~~ the ~~superior or~~ inferior surface~~s~~ of the implant is configured based in part on pre-existing parameters and in part on one or more patient specific measurements of the joint. ~~has a three-dimensional shape that substantially matches the shape of one of the femur and tubia surfaces.~~

2. Cancelled.

3. (Currently amended) The femoral implant of claim 1 wherein the implant has a thickness of a cartilage defect in a patient.

4-7. Cancelled.

8. (Currently amended) The femoral implant of claim 1 wherein the implant is constructed of a material comprising metal or metal alloy.

9. (Currently Amended) The femoral implant of claim 1 wherein the ~~material~~ implant comprises one or more biologically active materials.

10. Cancelled.

11. (Currently amended) The femoral implant of claim 1 wherein the implant is comprised of a metal or metal alloy and a polymer.

12. (Currently amended) The femoral implant of claim 1 further having a structure for attachment on at least one of the superior surface and the inferior surface selected from the group consisting of: ridges, pegs, pins, cross-members, teeth and protrusions.

13. (Currently amended) The femoral implant of claim 12 further having a plurality of structures for attachment.

14. (Currently amended) The femoral implant of claim 13 wherein the relative orientation of the structures for attachment are selected from the group consisting of: symmetrical, asymmetrical, rows, circles, triangles, and random.

15. (Currently amended) The femoral implant of claim 1 further having a peripheral structure selected from the group consisting of ridges and lips.

16. (Currently amended) The femoral implant of claim 15 wherein the peripheral structure extends along an entire perimeter of the implant.

17. (Currently amended) The femoral implant of claim 15 wherein the peripheral structure extends along a portion of a perimeter of the implant.

18-19. Cancelled.

20. (Currently Amended) The femoral implant of claim 1~~9~~ wherein the implant is ~~selected from~~ configured based on a pre-existing ~~a~~ library of implants.

21-41. Cancelled.

42. (Currently Amended) The femoral implant of claim 1 wherein the implant has a profile that approximates the contour of the ~~is a~~ subchondral bone. ~~conforming implant.~~

43-50. Cancelled

51. (Currently amended) The femoral implant of claim 1 wherein a central portion of the implant is of greater thickness than at least a portions of a periphery.

52-95. Cancelled.

96. (New) The femoral implant of claim 1 wherein the implant is configured based on a library of pre-existing shapes.

97. (New) The femoral implant of claim 1 wherein the implant is configured based on the dimensions of a mold.

98. (New) The femoral implant of claim 1 wherein a portion of the superior surface of the implant is configured to be placed against a bone cut.

99. (New) The femoral implant of claim 1 wherein the implant is configured from one patient specific measurement.

100. (New) The femoral implant of claim 99 wherein the one patient specific measurement is a width in the mediolateral direction.

101. (New) The femoral implant of claim 99 wherein the one patient specific measurement is a length in the anteroposterior direction.

102. (New) The femoral implant of claim 99 wherein the one patient specific measurement is a curvature of the joint in the coronal plane.

103. (New) The femoral implant of claim 99 wherein the one patient specific measurement is a curvature of the joint in the sagittal plane.

104. (New) The femoral implant of claim 1 wherein the implant is configured from more than one patient specific measurement.

105. (New) The femoral implant of claim 104 wherein the patient specific measurements are width in the mediolateral direction and length in the anteroposterior direction.

106. (New) The femoral implant of claim 104 wherein the patient specific measurements are width in the mediolateral direction and a curvature of the joint.

107. (New) The femoral implant of claim 106 wherein the measurement of a curvature of the joint is in the sagittal plane.

108. (New) The femoral implant of claim 106 wherein the measurement of a curvature of the joint is in the coronal plane.

109. (New) The femoral implant of claim 1 wherein at least one component engages the joint in a slideable or rotatable fashion.

110. (New) The femoral implant of claim 1 wherein two or more components are slideably engageable.

111. (New) The femoral implant of claim 1 wherein the implant is for a uni-compartmental knee replacement.

112. (New) The femoral implant of claim 1 wherein the implant is for a multi-compartmental knee replacement.

113. (New) The femoral implant of claim 1 wherein the profile of the implant can be configured to alter the load bearing ability relative to the joint.

114. (New) A tibial implant suitable for a knee joint of a patient comprising:

a superior surface and an inferior surface;

wherein the inferior surface is configured to oppose at least a portion of a tibia and be fixed to the portion when the implant is implanted and the superior surface is configured to oppose and articulate with at least a portion of a femoral implant surface when the implant is implanted; and

wherein the superior surface of the implant is configured based in part on pre-existing parameters and in part on one or more patient specific measurements of the joint.

115. (New) The tibial implant of claim 114 further having a structure for attachment on at least one of the superior surface and the inferior surface selected from the group consisting of: ridges, pegs, pins, cross-members, teeth and protrusions.

116. (New) The tibial implant of claim 115 further having a plurality of structures for attachment.

117. (New) The tibial implant of claim 114 wherein the implant is configured based on a pre-existing library of implants.

118. (New) The tibial implant of claim 114 wherein the implant has a profile that approximates the contour of the subchondral bone.

119. (New) The tibial implant of claim 114 wherein the implant is configured based on a library of pre-existing shapes.

120. (New) The tibial implant of claim 114 wherein the implant is configured based on the dimensions of a mold.

121. (New) The tibial implant of claim 114 wherein a portion of the superior surface of the implant is configured to be placed against a bone cut.

122. (New) The tibial implant of claim 114 wherein the implant is configured from one patient specific measurement.

123. (New) The tibial implant of claim 122 wherein the one patient specific measurement is a width in the mediolateral direction.

124. (New) The tibial implant of claim 122 wherein the one patient specific measurement is a length in the anteroposterior direction.

125. (New) The tibial implant of claim 122 wherein the one patient specific measurement is a curvature of the joint in the coronal plane.

126. (New) The tibial implant of claim 122 wherein the one patient specific measurement is a curvature of the joint in the sagittal plane.

127. (New) The tibial implant of claim 114 wherein the implant is configured from more than one patient specific measurement.

128. (New) The tibial implant of claim 127 wherein the patient specific measurements are width in the mediolateral direction and length in the anteroposterior direction.

129. (New) The tibial implant of claim 127 wherein the patient specific measurements are width in the mediolateral direction and a curvature of the joint.

130. (New) The tibial implant of claim 129 wherein the measurement of a curvature of the joint is in the sagittal plane.

131. (New) The tibial implant of claim 129 wherein the measurement of a curvature of the joint is in the coronal plane.

132. (New) The tibial implant of claim 114 wherein at least one component engages the joint in a slideable or rotatable fashion.

133. (New) The tibial implant of claim 114 wherein two or more components are slideably engageable.

134. (New) The tibial implant of claim 114 wherein the implant is for a uni-compartmental knee replacement.

135. (New) The tibial implant of claim 114 wherein the implant is for a multi-compartmental knee replacement.

136. (New) The tibial implant of claim 114 wherein the profile of the implant can be configured to alter the load bearing ability relative to the joint.

137. (New) An orthopedic implant comprising:

an articular surface; and

a bone-abutting surface configured to attach to a surface of the joint;

wherein the articular surface is sized and shaped based in part on pre-existing parameters and in part on one or more patient specific measurements of the joint.